

NOTE ON A FIRE-FLINT OF STRANDLOOPER ORIGIN.

BY JOHN HEWITT.

(With Plate I.)

In his important work on the Stone Ages of South Africa, Dr. Péringuey described a remarkable hafted stone implement, found in one of the Outeniqua Caves. He placed the type in his group of South African Neolithic implements, for, having been found along with the skeleton of one of the aboriginal cave-dwellers, it evidently belonged to that race of people variously known as Strandloopers, Coastal Bushmen or Primitive Hottentots.

It is the object of these few notes to give further records of the same type of implement, and to suggest a mode of use.

The earliest reference to the above-mentioned specimen is found in the record of the monthly meeting of the South African Philosophical Society for September, 1892, which reads as follows: "Mr. Péringuey exhibited a stone implement with wooden handle, which was found in a Bushman or Hottentot grave near George. The handle had been attached with some kind of cement, and the implement had been used as a hand weapon." At the December meeting of the Society another note on the same specimen was contributed by Dr. Marloth. His report was as follows: "He had examined the stone implement, and found that the cement used in connecting the handle to the head consisted of resin—probably fine resin and chalk. He had also found starch grains from wheat and rice, which led him to conclude that the natives must have used wheat and rice, and therefore this cement must have been made after the arrival of white men in South Africa."

The account of the discovery by Mr. R. E. Dumbleton, as given in Dr. Péringuey's monograph, contains the following: "On coming to the head (of a human skeleton) I discovered immediately in front of the face two tortoise shells, etc. etc. With these there was the lumbar vertebra of a large ruminant, several flint scrapers, and also a peculiar instrument consisting of a piece of flint fixed in gum-cement, in which was inserted a piece of wood about 4 in. long, serving as handle. The latter unfortunately was perfectly rotten and broke off short."

Another example of this implement but in better state of preservation, has been in the Albany Museum for some years, and a short description was

published in the 'Records of the Albany Museum,' vol. ii, p. 282, and in the Guide Book to the Albany Museum. This specimen also was found in a cave near Plettenberg Bay. The essential features of the implement are—a small piece of chalcedony, roughly trimmed, presenting a concave cutting edge; this is mounted in a large lump of resin, a horn handle with slender and tapering distal end fitting into a comparatively short socket in the resin. The total length of the specimen is $9\frac{1}{2}$ in. There is nothing to suggest a great antiquity for the specimen. The horn handle is well preserved, and, in shaping it, several sharp cuts have been made, which clearly point to the use of a steel or iron blade; it is possible, however, that the present shape of the handle is not as left by the original maker, for whilst the resinous socket is rounded, the socketing portion of the horn has more or less squared surfaces.

Now, what is the function of this unique implement? Dr. Péringuey rightly remarks that "as a serviceable cutting or graving tool it could not prove of much service." He then made the following suggestion: "My first impression was that this hafted tool was that of a ruler or medicine man, somewhat on the lines of the *baton de commandement*, and I am inclined still to look upon it in that light." This explanation seems to me quite untenable, in view of the weak attachment of the handle in our specimen, which would be useless as a baton, or as a weapon, for on moderately rough treatment the lump of resin would break away from the handle. As a cutting implement, on the other hand, it could only be effectively employed when grasped firmly by the resinous lump, the handle being quite free.

The solution of the problem, in my judgment, lies in a suggestion made to me by Mr. Frank Brownlee, who remarked on the strong resemblance in shape between the piece of chalcedony and the imported flints commonly used by the natives of the Eastern Province for striking fire. It could certainly be used as a fire-flint, and, I think, has actually been thus employed, for the cutting edge is worn down in the middle as such flints commonly are. From the fine illustration that accompanies Dr. Péringuey's account I infer that his specimen also has been used in the same way; indeed he says—"The very sinuous edge had been broken before burial probably, as indicated by the comparatively fresh fracture." It may be noted, too, that the stone was actually described by its discoverer as a flint.

Further, the implement as a whole could be utilised as a *combined firelight and torch*, for the resin is very inflammable, and the horny haft would make quite a serviceable handle when thus employed. I cannot positively assert that the resin has actually been burnt since the implement was made, but one point may be stated in favour of this view. It is suggested that the resin originally covered more of the surface of the stone than at present, for the basal portion imbedded in the resinous socket seems

hardly sufficient to afford firm attachment to the stone, however it be used ; in its present condition the stone is imperfectly mounted.

The mounting of small chips of quartz or other hard stones in resin or gum-cement seems to have been a practice of Bushmen, and there are several specimens of stone-tipped arrows thus prepared in the South African Museum. Iron, again, has been known to all the South African tribes for centuries, although as a comparative rarity to the Hottentots and Bushmen ; its scarcity may perhaps explain the very late adoption of the flint and steel amongst the South African tribes as a whole.

Tinder would have to be used in conjunction with such an implement, but this was no novelty to the aborigines, and indeed is constantly used by the Kalahari Bushmen of the present day along with their fire-sticks. It is true that owing to the brittle nature of the resin a moderate blow on steel would weaken the attachment, and for use in this way the implement would be quite impracticable. To produce fire there is no need to strike a blow : it is sufficient to draw the steel rapidly over the edge of the flint, the latter and its mount of resin being held firmly in the hand.

It may be urged that an easier and more direct way of producing fire was well known to the aborigines, and that Bushmen produce fire by means of fire-sticks with astonishing rapidity. Nevertheless, fire-sticks have their limitations, and in the dreary wet seasons of the Southern Cape Coast the flint and steel may be more reliable. This is indeed just the kind of implement that the coastal cave-dwelling people might be expected to evolve. Moreover, Dr. Péringuey has actually received from the Coldstream Cave what appears to be the steel striker of a tinder-box, and this same cave contained Strandlooper remains.

It is also suggested that the tortoise shells found by Mr. Dumbleton along with the implement were improvised tinder-boxes.

According to the original report, three such shells accompanied the skeleton, but there were no records of tortoise shells from other Strandlooper burial places. In prosecuting his researches, Dr. Péringuey obtained very detailed records of circumstances and accessories from a number of burial sites ; indeed, one of his investigators was specially asked to search for more examples of the above-mentioned stone implement and for tortoise shells, but failed to find either, though beads and sundry other objects were taken. Therefore the association of tortoise shells with this unique type of stone implement is probably not accidental. But on this point I do not lay great stress, for at the present day tortoise shells are much used by natives throughout the sub-continent, and for a variety of purposes ; they are included amongst the numerous items in the outfit of a Kaffir witch-doctor, and are commonly used by Bush women in Kalahari as powder boxes.

Another specimen of essentially the same type, though differing greatly

in details, has been in our collection for some years, and was referred to by me in the 'Records of Albany Museum,' vol. ii, p. 283. It consists of a limb bone of some bird with a lump of resin at one end. The bone has been marked with incised crosses and transverse lines which perhaps originally served as a tally. The resinous lump expands a little distally, and on one side presents a moderately deep depression, at the base of which is a fragment of hard stone, firmly attached to the resin. This stone cannot be removed for examination without injury to the specimen, but is evidently of flinty nature. It is presumably the broken base of a much larger stone which was formerly mounted in the resin.

The total length of this specimen is 4 in. Thus it is much too small for use as a weapon or baton. It came from the same cave as the first-mentioned specimen, and was no doubt used for a similar purpose. It may have functioned as the striker of a fire-making apparatus and thus can be termed an *aboriginal match*. Lastly, a piece of resin mounted on a stick was found many years ago in a rock shelter at Woest Hill, Grahamstown, along with a number of bones. The resin is a cylindric-ovoid lump about 2 in. long and $\frac{3}{4}$ in. thick; it has a deep socket which still contains decayed wood. There is, however, no indication that this was used as a mount for a stone. It is of interest as additional evidence that the cave-dwelling aborigines made use of resin. Mrs. H. M. Barberton informs me that such resin was quite familiar to the European settlers under the name of "Bushman resin." It was generally believed that the Bushmen employed this material, when available, in the attachment of arrow-heads to the shaft. The chief source of the resin seems to be the roots of *Pterocelastrus variabilis*. Thus obtained, it is very brittle, and for cementing purposes must be mixed with other substances.

Again, in association with typical implements of the Bushman type, there have been found at several inland localities a few worked stones of striking resemblance to fire-flints, though made of local rock. One such specimen, of agate, is in the Albany Museum from Barrow Hill, O.F.S. (Miss Joan Whitworth), and others from Kimberley have been collected by Mr. Jas. Swan and Mr. J. H. Power. But, so far as I know, nothing of this kind has been found under circumstances pointing to great antiquity.

Here it may be added that Sir John Evans, in his work on the 'Ancient Stone Implements of Great Britain,' commented on the resemblance between the modern "strike-a-lights" and the ancient "scrapers," and came to the conclusion that a certain proportion of these latter were in use not for scraping hides but for scraping iron pyrites, and not improbably in later days even iron or steel for procuring fire. He also cited various instances of the occurrence in ancient graves of flint implements in association with nodules of iron pyrites—which for the purpose of producing sparks seems to be as effective as iron.

There is much probability that fire-flints were introduced to the Strandloopers by Europeans. They are mentioned by various writers of past centuries as suitable objects for barter with the natives. John Barrow, referring to some Kaffirs whom he met on the Kareiga River (1797), says: "They received each a small present, consisting of tobacco, knives, flints and steels, tinder-boxes, and a few glass beads. These are the sort of articles which the farmers have been in the habit of exchanging for their valuable breed of cattle."